

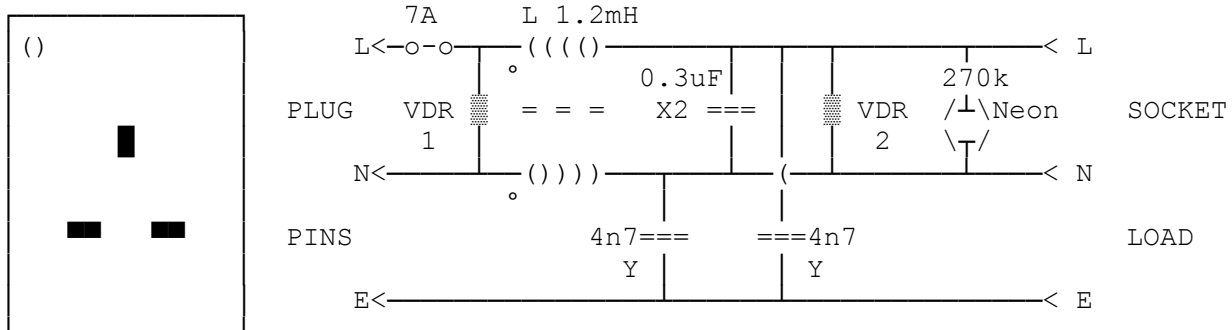
Mains Plugtop Filter Adapter

By G8MNY

(Updated Aug 19)

(8 Bit ASCII graphics use code page 437 or 850, Terminal Font)

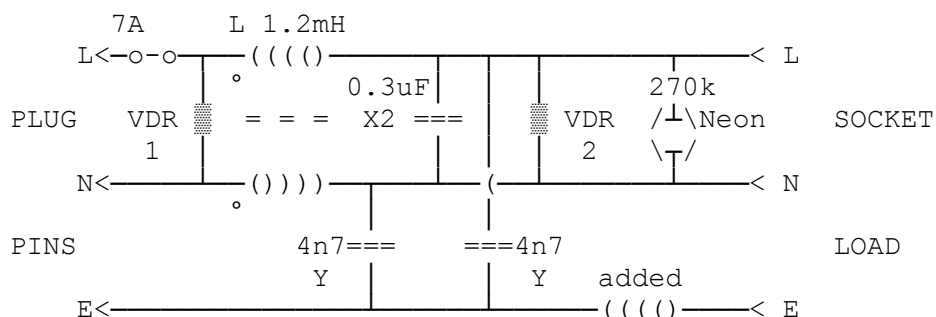
These were made for UK's BT in 3A (1A/3 KBA 85) & 7A (1A/7 KBA 85) models before all kit came with filters. I bought a few over the years at various junk sales. They are not just a single Voltage Dependent Resistor suppresser (VDR) across the mains, as some "Computer spike" filters are, but have 2 VDRs either end of a proper balanced RF power line filter.



N.B. in some versions VDR2 is L-E. This can cause problems with ELCBs & is best removed!

The VDRs are both 275V40B, & the caps are X2 or Y type 250V AC rated. The toroid has L & N wound on opposite sides (13 Turns each) on an unsaturated core. It is wire up so phase currents cancel the high normal mode flux, so it does not saturate & become "ZERO inductance" with the mains current. The inductance L was measured for just 1 winding.

They are quite effective at reducing RFI, on noisy sources & the Shack Rx, especially on 80/40m bands. I found much of RFI was not on the mains L & N, but gets through the earth line. So I modified them to have a 10 turns on a 2cm dia ferrite on the earth too (rated to blow a fuse). This was done on the wire to the earth socket...



CONCLUSION

This is a useful addition to my kit when I put on ham demo station. I always use an RF earth (clipped on local radiators or an outside stake) if I am using just a random wire aerial.

See also buls on "Reducing Electronic RF QRM", "Inverter Petrol Generators" & "Clip on QRM Probe".

Why Don't U send an interesting bul?

73 de John G8MNY @ GB7CIP

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